

REMARKS

Claims 1-19 remain pending in this patent application. Claims 5, 6, 10, 11, 13, 14, 16, 17 and 19 stand withdrawn from further consideration as being drawn to non-elected species.

ALLOWABLE SUBJECT MATTER

Applicant notes with appreciation the Examiner's recognition of allowable subject matter in claims 7, 8, 15 and 18. For reasons presented below, Applicant submits that all of the pending claims are allowable.

OBJECTIONS TO CLAIMS

In this paper, Applicant has amended claims 3, 7, 15 and 18 as suggested by the Examiner. Applicant has also amended claims 7, 15 and 18 to correct obvious errors. All of the amendments to the claims made herein are non-limiting.

Applicant submits that the Examiner's objections to the claims have been obviated by amendments to the claims made herein.

PRIOR ART REJECTION I

Claims 1, 4 and 12 were rejected under 35 USC § 102(b) as being anticipated by US 4514755 (Tabei). Applicant traverses this rejection.

The Tabei imager does not have electric charge storage layers, and does not have vertical transfer paths, as recited in claim 1. A device similar to the Tabei imager is discussed under the heading, "Description of the Related Art," in the specification of this application on page 5, lines 4-9. The Tabei imager incorporates a base with superimposed photosensitive layers that can detect and absorb light of different colors. As described in column 6, line 63, through column 7, line 16, and shown in Fig. 3 of Tabei, each of the photosensitive layers 3, 4, includes a sublayer of photoconductive material sandwiched between a top transparent electrode sublayer and a bottom transparent mosaic electrode sublayer. As described in column 7, lines 62-68, the sublayers 36, 33 of photoconductive material undergo a decrease in resistance in response to incident light, and the reduced resistance is detected and recorded by the top and bottom electrode sublayers. The Tabei imager cannot be fairly characterized as a "CCD color solid-state

image pickup device" with "electric charge storage sections" having "a plurality of electric charge storage layers," as required by claim 1.

The CCD image pickup device disclosed and claimed in this application realizes significant advantages over a device like the one disclosed by Tabei. In Applicant's disclosed and claimed CCD image pickup device, for example, reading of the signal charges is greatly facilitated. The Tabei device cannot meet the requirements of claims 1, 4 and 12 and cannot achieve the advantages of the CCD solid-state image pick up device disclosed and claimed in this application.

In view of the foregoing observations, Applicant submits that Tabei cannot properly serve as a basis for rejecting claim 1 or dependent claims 4 and 12 under 35 USC § 102(b).

PRIOR ART REJECTION II

Claims 2 and 3 were rejected under 35 USC § 103(a) as being unpatentable over Tabei in view of US US 7132724 B1 (Merrill). Applicant traverses this rejection.

The Examiner acknowledges that Tabei does not disclose an electric charge path, as required by claims 2 or 3. The Examiner cites Merrill for its disclosure of "an electric charge path, which causes electric charges stored in the electric charge layers to migrate to the surface of the semiconductor substrate ..." and contends that it would have been obvious to modify the Tabei device "by the teaching of Merrill."

First, Applicant observes that there are no teachings in Merrill that can remedy deficiencies in the Tabei disclosure vis-à-vis the requirements of parent claim 1, as discussed above.

Applicant also observes that there are no electric charge layers in the Tabei device, as discussed above. Thus, the modification of the Tabei device proposed by the Examiner is at odds with the clear disclosure in Tabei, and no device resulting from a combination of the teachings in Tabei and Merrill could meet the requirements of Applicant's claims.

In view of the foregoing observations, Applicant submits that no reasonable combination of the disclosures in Tabei and Merrill can properly serve as a basis for rejecting claims 2 or 3 under 35 USC § 103(a).

PRIOR ART REJECTION III

Claim 9 was rejected under 35 USC § 103(a) as being unpatentable over Tabei in view of US 6535249 B1 (Stavely). Applicant traverses this rejection.

The Examiner acknowledges that Tabei does not disclose on-chip light gathering optical systems provided on upper portions of the respective light-receiving sections, as required by claim 9. As a remedy for this deficiency, the Examiner cites the disclosure in Stavely of a digital camera optical system having a microlens mounted on a light-gathering electronic sensor, and proposes modifying the Tabei device to incorporate Stavely's teachings.

Without acquiescing in the Examiner's proposal to combine the teachings in Tabei and Stavely, Applicant observes that there are no teachings in Stavely that can remedy deficiencies in Tabei vis-à-vis the requirements of parent claim 1, as discussed above.

In view of the foregoing observations, Applicant submits that no reasonable combination of the disclosures in Tabei and Stavely can properly serve as a basis for rejecting claim 9 under 35 USC § 103(a).

ALLOWABILITY OF WITHDRAWN CLAIMS

In the discussion above, Applicant has shown that claim 1 is allowable. Since claim 1 is generic to all of the species identified by the Examiner, and since all of the withdrawn claims depend directly or indirectly from claim 1, Applicant requests that the Examiner consider the withdrawn claims on their merits and recognize these claims as allowable.

OTHER PRIOR ART

Applicant has considered the other prior art cited by the Examiner. Applicant is not commenting on this prior art, because it was not applied against the claims in this application.

CONCLUSION

In view of the amendments, observations and arguments presented herein, Applicant respectfully requests that the Examiner reconsider and withdraw the objections and rejections stated in the outstanding Office Action and recognize all of the pending claims as allowable.

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Reply to Office Action of February 26, 2008

Docket No.: 0649-0948P

If unresolved matters remain in this application, the Examiner is invited to contact Frederick R. Handren, Reg. No. 32,874, at the telephone number provided below, so that these matters can be addressed and resolved expeditiously.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.147; particularly, extension of time fees.

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Respectfully submitted,

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